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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT:

FROM:

James W. Caldwell, Acting Chief Field Operations and Compliance Policy Branch

Mary T. Smith, Director / (2)

THROUGH:

Field Operations and Support Division

TO: Docket No. A-90-16

On July 18, 1990, Mary Smith, John Holley, John Hannon, and I conducted a conference call with Dr. Kate Mahaffey of the National Institute of Environmental Health Sciences and Dr. Victor Fung of the Public Health Service. The issue was Ethyl's request to use the manganese-base additive MMT in unleaded gasoline. Dr. Mahaffey raised concerns about the neurotoxicity of manganese combustion products and the fact that there is a high retention of manganese in infants and young children. She commented that there had been a study linking learning disabilities with manganese enriched infant formula. However, she also noted that manganese is required in the diet at 6 to 9 milligrams per day. It was also commented that manganese is much more toxic via inhalation than She also questioned Ethyl's data showing only about ingestion. half of a percent of the manganese being emitted (the rest remaining in the engine, catalyst, and exhaust system), noting that there is a 1988 California Paper linking a build-up of manganese in the environment as a result of the use of MMT in leaded We encouraged Dr. Mahaffey and Dr. Fung to submit gasoline. comments to the docket.